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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,913	08/31/2001	Fred E. Barnes	005950-556	8128

7590

12/19/2002

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EXAMINER

TOOMER, CEPHIA D

ART UNIT PAPER NUMBER

1714

DATE MAILED: 12/19/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	09/942,913		BARNES ET AL.	
	Examiner		Art Unit	
	Cephia D. Toomer		1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the amendment filed August 23, 2002 in which claims 16-20 were amended and claims 21-29 were added.

The objection to the specification is withdrawn in view of the amendment to the specification and Applicant's remarks.

The rejection of the claims under 35 USC 112, second paragraph is withdrawn in view of Applicant's arguments.

Claim Rejections - 35 USC § 102

Claims 1-20 and 25-29 are rejected under 35 USC 102(b) as being anticipated by WO 9822556.

WO teaches an unleaded aviation fuel composition having a MON of at least 98 wherein the fuel comprises triptane and/or 2,3,3-trimethyl pentane (see page 2, lines 13-29). Since light alkylates are disclosed in the instant specification as a mixture of C₆ to C₉ isoparaffins with trimethyl pentanes being the major product of alkylation, triptane and 2,3,3-trimethylpentane are considered as light alkylates. The fuel composition also contains a component (a) which is at least one saturated aliphatic liquid hydrocarbon containing 4 to 10 carbon atoms. Examples of component (b) include iso-pentane, iso-octane and a mixture of these two components. WO teaches that the ratio of triptane and/or 2,2,3-trimethylpentane to iso-pentane to iso-octane is 10-80: 5-25: 10: 80. WO teaches that the composition may comprise up to 30 vol. % of an aromatic liquid

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hydrocarbon, such as toluene (see page 4, lines 7-17, 27-35; page 5, lines 1-6, 10-13, 21-24; Examples 1).

Accordingly, WO teaching all the material limitations of claims anticipates the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 9822556.

WO teaches an unleaded aviation fuel composition having a MON of at least 98 wherein the fuel comprises triptane and/or 2,3,3-trimethyl pentane (see page 2, lines 13-29). Since light alkylates are disclosed in the instant specification as a mixture of C₆ to C₉ isoparaffins with trimethyl pentanes being the major product of alkylation, triptane and 2,3,3-trimethylpentane are considered as light alkylates. The fuel composition also contains a component (a) which is at least one saturated aliphatic liquid hydrocarbon containing 4 to 10 carbon atoms. Examples of component (b) include iso-pentane, iso-octane and a mixture of these two components. WO teaches that the ratio of triptane and/or 2,2,3-trimethylpentane to iso-pentane to iso-octane is 10-80: 5-25: 10: 80. WO teaches that the composition may comprise up to 30 vol. % of an aromatic liquid

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hydrocarbon, such as toluene (see page 4, lines 7-17, 27-35; page 5, lines 1-6, 10-13, 21-24; Examples 1).

WO fails to teach that the gasoline composition of his invention contains greater than 0 ml of tetraethyl lead/gallon of gasoline. However, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp of America v. Banner*, 227 USPQ 773 (Fed. Cu 1985). The language greater than 0 reads on lead as an impurity or on such amount that is negligible.

Applicant argues that WO fails to anticipate the claimed invention because the composition of WO is presumably devoid of lead whereas the composition of the present invention contains a reduced amount of lead.

Claims 1, 6 and 16 (independent claims) recite that the lead is present in an amount of about 0 to about 1 ml. This language clearly reads on 0 and thus an unleaded composition. With respect to those claims that recite greater than 0 to about 1 ml tetraethyl lead, as stated above, the language greater than 0 reads on impurities and negligible amounts as well as being close enough to 0 that the skilled artisan would expect that the present gasoline and an unleaded gasoline would have the same properties.

Applicant argues that WO does not teach the claimed light alkylate because it is Applicant's position that triptane and 2,2,3-trimethylpentane are not light alkylates.

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At page 11, line 19 through page 20 of the specification, Applicant discloses "light alkylates" as a mixture of C₆ to C₉ isoparaffins with trimethylpentane isomers as the major product. The examiner maintains that triptane (C₇) and 2,2,3-trimethylpentane (C₈) are light alkylate components.

With respect to the claimed proportions, Example 1 of WO teaches 40% 2,2,3-trimethylbutane (triptane) (alkylate), 12% isopentane (C₅) and 48% iso-octane, WO also teaches that the gasoline may contain 5-30 % toluene. Given these teachings, WO anticipates the claims.

Applicant argues that WO fails to teach the method of claim 16 because WO does not take an existing aviation gasoline and blend it with iso-octane and toluene.

WO blends the same components as applicant to arrive at the same gasoline as Applicant. It is irrelevant that WO fails to recite that the components admixed with iso-octane make up an aviation gasoline.

It should be noted that the composition of WO does not require the presence of the ether compounds and that WO anticipates claims 26-29.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

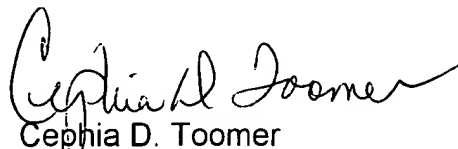
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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 703-308-2509. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Cephia D. Toomer
Primary Examiner
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